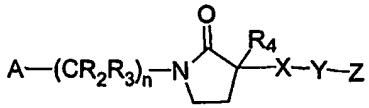
We claim:

1. A compound of general formula (I),



(I)

their stereoisomers, their tautomeric forms, their pharmaceutically acceptable salts, their pharmaceutically acceptable solvates, wherein A is selected from COR_1, CO_2H, CH_2CO_2H, CONHOH, $CONHOR_1$, $N(OH)COR_1$, $C(=NOR_1)NHR_1$, SH, CH_2SH, SO_2NHR_1 & $S(=NH)_2R_1$.

R_1 represents hydrogen, substituted or unsubstituted groups selected from linear or branched $(C_1\text{-}C_8)$alkyl, $(C_3\text{-}C_7)$cycloalkyl, acyl, aryl, aralkyl, alkylaminocarbonyl, arylaminocarbonyl, aralkylaminocarbonyl, heteroarylaminocarbonyl, heteroaralkylaminocarbonyl, or heterocyclylaminocarbonyl; R_2 and R_3 may be same or different and independently represent hydrogen, halogen, substituted or unsubstituted groups selected from linear or branched $(C_1\text{-}C_8)$alkyl, $(C_3\text{-}C_7)$cycloalkyl, acyl, groups, substituted or unsubstituted groups selected from $(C_3\text{-}C_7)$cycloalkyl, aryl, aralkyl, heteroaryl, heterocycle groups; X represents optionally substituted $(C_3\text{-}C_{13})$ carbocyclic residue or a 5-14 membered heterocyclic system containing 1-4 heteroatoms selected from the group consisting of N, O, or S; Z represents substituted $(C_3\text{-}C_{13})$ carbocyclic residue or a 5-14 membered substituted heterocyclic system containing 1-4 heteroatoms selected from the group consisting of N, O, or S, wherein the substituents on Z may be selected optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted alkoxy alkyl or substituted groups selected from $(CH_2)_r$-$(C_3\text{-}_6)$cycloalkyl, $(CH_2)_r$-cycloalkenyl, $(CH_2)_r$-phenyl, or $(CH_2)_r$-(3-14) membered heterocycle comprising 1-4 heteroatoms selected from the group consisting N, O and S; n = 1-2; r = 0-6; Y represents $(CR'R'')_p$, $O(CR'R'')_p$, $(CR'R'')_pO$, $C(O)(CR'R'')_p$, $(CR'R'')C(O)$, $NR'(CR'R'')_p$, NR'NR'', $(CR'R'')_pNR'$, $NR'C(O)(CR'R'')_p$, $CONR'(CR'R'')_p$, $(CR'R'')_pNR'C(O)$, $(CR'R'')_pNR'C(O)$, $(CR'R'')_pC(O)NR'$, NR'CONR', $(CR'R'')_pS(O)_q$, $S(O)_q(CR'R'')_p$, wherein p = 0-2 and q = 0-2; R_4 represents H, SR', halogen, NR'R'', OR', CN, NO_2, $(C_1\text{-}C_{10})$alkyl-R^a, $(C_2\text{-}C_{10})$alkenyl-R^a, $(C_2\text{-}C_{10})$alkynyl-R^a, $(CR'R'')_p$-R^a, $O(CR'R'')_pR^a$, $(CR'R'')_pO(CR'R'')_pR^a$, $(CR'R'')_pNR'(CR'R'')_pR^a$, $(CR'R'')_pC(O)(CR'R'')_pR^a$, $(CR'R'')_pOC(O)(CR'R'')_pR^a$, $(CR'R'')_pC(O)O(CR'R'')_pR^a$, $(CR'R'')_pNR'C(O)(CR'R'')_pR^a$, $(CR'R'')_pC(O)NR'(CR'R'')_pR^a$, $(CR'R'')_pS(O)_q(CR'R'')_pR^a$, $(CR'R'')_pS(O)_qNR'(CR'R'')_pR^a$, $(CR'R'')_pNR'S(O)_q(CR'R'')_pR^a$, $(CR'R'')_pOC(O)NR'(CR'R'')_pR^a$, $(CR'R'')_pNR'C(O)O(CR'R'')_pR^a$, wherein p = 0-2 and q = 0-2; R' and R'' may be same or different and independently represent H, alkyl group, linear or branched substituted or

unsubstituted (C_1-C_6)alkyl, linear or branched substituted or unsubstituted (C_1-C_6)alkenyl, linear or branched substituted or unsubstituted (C_1-C_6)alkynyl groups, where R^a may represent H, halogen, alkyl group, linear or branched substituted or unsubstituted (C_1-C_6)alkyl, linear or branched substituted or unsubstituted (C_1-C_6)alkenyl, linear or branched substituted or unsubstituted (C_1-C_6)alkynyl groups.

2. A compound as claimed in claim 1 where Z is selected from pyrrolidinyl, imidazolidinyl, piperidinyl, piperazinyl, dihydrothiophene, dihydropyran, dihydrofuran, dihydrothiazole, pyridyl, thienyl, furyl, pyrrolyl, oxazolyl, thiazolyl, isothiazolyl, imidazolyl, isoxazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, benzopyranyl, benzopyranonyl, benzofuranyl, benzothienyl, indolinyl, indolyl, azaindolyl, azaindolinyl, benzodihydrofuranyl, benzodihydrothienyl, pyrazolopyrimidinyl, pyrazolopyrimidonyl, azaquinazolinyl, azaquinazolinoyl, pyridofuranyl, pyridothienyl, thienopyrimidyl, thienopyrimidonyl, quinolinyl, pyrimidinyl, pyrazolyl, quinazolinyl, quinazolonyl, pyrimidonyl, pyridazinyl, triazinyl, benzoxazinyl, benzoxazinonyl, benzothiazinyl, benzothiazinonyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, benzotriazolyl group; more preferably Z represents quinolinyl, pyrimidinyl, quinazolinyl groups.

3. A compound of claim 1 wherein the substitutions on any substitutent as claimed in claim 1 may be selected from hydroxyl, oxo, halo, thio, nitro, amino, cyano, formyl, alkyl, haloalkyl, perhaloalkyl, alkoxy, haloalkoxy, perhaloalkoxy, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, bicycloalkyl, bicycloalkenyl, alkoxy, alkenoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocycloalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclyloxy, heterocyclylalkoxy, heterocyclylalkoxyacyl, acyl, acyloxy, acylamino, monosubstituted or disubstituted amino, arylamino, aralkylamino, carboxylic acid and its derivatives such as esters and amides, carbonylamino, hydroxyalkyl, aminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, arylthio, alkylsulfonylamino, aminocarbonylamino, alkylaminocarbonylamino, alkoxyamino, hydroxyl amino, sulfonyloxy, alkylsulfonyloxy, alkoxycarbonylamino, aryloxycarbonylamino, aralkyloxycarbonylamino sulfenyl derivatives, sulfonyl derivatives, sulfonic acid and its derivatives.

4. A compound of claim 1 selected from

2-(3-Amino-3-{4-[2-(2,2-dimethyl-cyclopropyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-{3-Amino-3-[4-(2-methoxymethyl-quinolin-4-ylmethoxy)-phenyl]-2-oxo-pyrrolidin-1-yl}-4-methyl-pentanoic acid hydroxyamide;

2-{3-Amino-3-[4-(2-methoxymethyl-quinolin-4-ylmethoxy)-phenyl]-2-oxo-pyrrolidin-1-yl}-N-hydroxy-propionamide;

N-Hydroxy-2-{3-[4-(2-methoxymethyl-quinolin-4-ylmethoxy)-phenyl]-3-methyl-2-oxo-pyrrolidin-1-yl}-propionamide;

2-{3-Amino-3-[4-(2-isopropoxymethyl-quinolin-4-ylmethoxy)-phenyl]-2-oxo-pyrrolidin-1-yl}-4-methyl-pentanoic acid hydroxyamide;

2-{3-Amino-3-[4-(2-isopropoxymethyl-quinolin-4-ylmethoxy)-phenyl]-2-oxo-pyrrolidin-1-yl}-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(2-methoxy-ethyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-{3-Amino-2-oxo-3-[4-(2-p-tolyl-quinolin-4-ylmethoxy)-phenyl]-pyrrolidin-1-yl}-4-methyl-pentanoic acid hydroxyamide;

2-{3-Amino-2-oxo-3-[4-(2-p-tolyl-quinolin-4-ylmethoxy)-phenyl]-pyrrolidin-1-yl}-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(4-chloro-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(4-chloro-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(4-fluoro-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(4-fluoro-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(4-methoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(4-methoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

N-Hydroxy-2-(3-{4-[2-(4-methoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-3-methyl-2-oxo-pyrrolidin-1-yl)-propionamide;

2-(3-Amino-3-{4-[2-(4-ethoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(4-ethoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(4-benzyloxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(4-benzyloxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(4-methylsulfanyl-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(4-methylsulfanyl-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-{3-Amino-2-oxo-3-[4-(2-m-tolyl-quinolin-4-ylmethoxy)-phenyl]-pyrrolidin-1-yl}-4-methyl-pentanoic acid hydroxyamide;

2-{3-Amino-2-oxo-3-[4-(2-m-tolyl-quinolin-4-ylmethoxy)-phenyl]-pyrrolidin-1-yl}-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(3-chloro-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(3-chloro-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(3-methoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

2-(3-Amino-3-{4-[2-(3-methoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(5-chloro-thiophen-2-yl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-(3-Amino-3-{4-[2-(5-methyl-furan-2-yl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-4-methyl-pentanoic acid hydroxyamide;

N-Hydroxy-2-(3-methyl-3-{4-[2-(5-methyl-furan-2-yl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-propionamide;

2-(3-Amino-3-{4-[2-(5-methyl-furan-2-yl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-N-hydroxy-propionamide;

2-{3-Amino-3-[4-(4-methoxymethyl-benzyloxy)-phenyl]-2-oxo-pyrrolidin-1-yl}-4-methyl-pentanoic acid hydroxyamide;

2-{3-Amino-3-[4-(2-methoxymethyl-quinolin-4-ylmethoxy)-phenyl]-2-oxo-pyrrolidin-1-yl}-4-methyl-pentanoic acid;

2-{3-Amino-3-[4-(2-isopropoxymethyl-quinolin-4-ylmethoxy)-phenyl]-2-oxo-pyrrolidin-1-yl}-4-methyl-pentanoic acid;

2-{3-Amino-2-oxo-3-[4-(2-p-tolyl-quinolin-4-ylmethoxy)-phenyl]-pyrrolidin-1-yl}-4-methyl-pentanoic acid;

2-(3-Amino-3-{4-[2-(4-methoxy-phenyl)-quinolin-4-ylmethoxy]-phenyl}-2-oxo-pyrrolidin-1-yl)-propionic acid.

5. A pharmaceutical composition, which comprises a compound as defined in claims 1-4, and a pharmaceutically acceptable carrier, diluents or excipients or solvate.

6. A pharmaceutical composition according to claim 5, in the form of tablets, pills, capsules, powder, granules, syrup, solution or suspension.

7. A method for inhibition of production or action of TACE, MMP's and aggrecanase comprising administering a therapeutically acceptable amount of compound of formula (I) as claimed in any preceding claims, or a therapeutically acceptable salt or prodrug thereof.

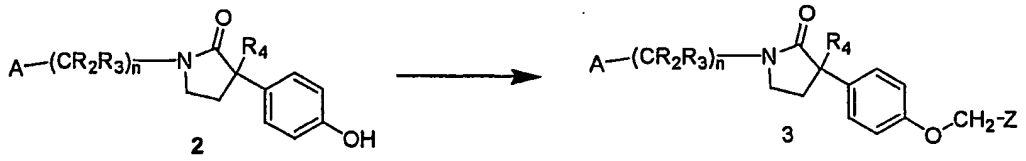
8. A method of treatment or prophylaxis of various inflammatory, infectious, immununological or malignant diseases comprising administering an effective amount of a compound according to any preceding claims to a mammal including human in need thereof.

9. Use of the compounds as claimed in any preceding claims or their pharmaceutically acceptable salts for the preparation of medicine suitable for the treatment of diseases associated with excess of TNF-α (Tumour Necrosis Factor alpha) production or secretion.

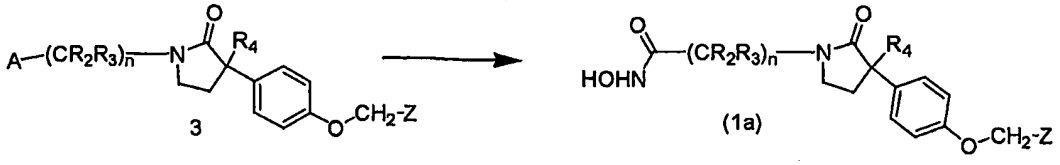
10. A medicine for the treatment of diseases associated with excess of TNF-α (Tumour Necrosis Factor alpha) production or secretion comprising the compounds as claimed in claims 1-4, or their pharmaceutically acceptable salts.

11. A process for preparing compound of formula (I) as claimed in claim 1, comprising the steps of :

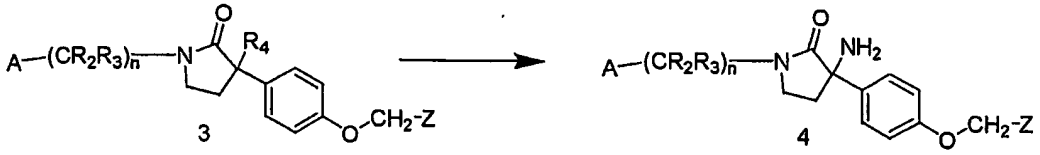
i) converting a compound of formula (2) to a compound of formula (3) where all the symbols are as defined in claim 1



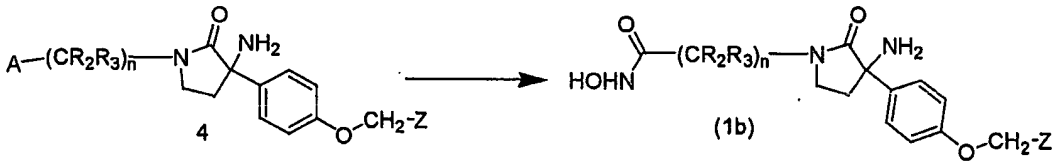
ii) covering a compound of formula (3) to compound of formula (1a), where all symbols are as defined in claim 1



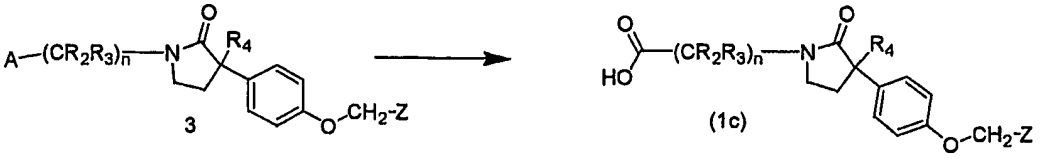
iii) optionally, converting a compound of formula (3) to a compound of formula (4) where all the symbols are as defined in claim 1



iv) converting the compound of formula (4) to further compound formula (1b), where all symbols are as defined earlier



v) alternatively, compound of formula (3) may optionally be converted to compound of formula (1c), where all symbols are as defined earlier



vi) alternatively, compound of formula (4) may optionally be converted to compound of formula (1d), where all symbols are as defined earlier